



Europäisches Patentamt  
European Patent Office  
Office européen des brevets

(19)

(11) Publication number:

0 119 043

A2

(12)

## EUROPEAN PATENT APPLICATION

(21) Application number: 84301397.0

(61) Int. Cl.<sup>3</sup>: B 65 D 85/32

(22) Date of filing: 02.03.84

(30) Priority: 02.03.83 GB 8305815

(43) Date of publication of application:  
19.09.84 Bulletin 84/38

(84) Designated Contracting States:  
AT BE CH DE FR GB IT LI LU NL SE

(71) Applicant: AUTOBAR VENDABEKA LIMITED  
Wylds Road  
Bridgwater Somerset(GB)

(71) Applicant: Brown, William Robert  
"The Birches" Lower Broad Oak Road  
West Hill Ottery St. Mary Devonshire(GB)

(72) Inventor: Brown, William Robert  
"The Birches" Lower Broad Oak Road  
West Hill Ottery St. Mary Devonshire(GB)

(74) Representative: Warren, Keith Stanley et al,  
BARON & WARREN 18 South End Kensington  
London W8 5BU(GB)

(54) Packaging boxes or cartons.

(57) A packaging box for eggs, fruit or other articles is of rectangular shape in plan and comprises a hollow base part (1), optionally moulded with article receiving pockets (4), and a hollow lid (2). The base part and lid are a one-piece moulding of transparent sheet plastics material. Their rims (12,16) are joined together along the rear side of the box by a web hinge so that the lid (2) may be opened and closed relatively to the base part (1). The lid is fastened in its closed position by fastening devices (20) disposed on the rims (12,16) opposite the hinge. The lid (2) comprises a generally flat top (13) and flat peripheral walls (14,15) and is supported and reinforced by a cardboard insert (25) having a top and depending flaps (27,28) juxtaposed the lid top and walls (13,14,15). The bottom edge of the rear insert flap (27) rests on the rim (12) of the base part and the bottom edge of the front flap (28) rests on tabs (33) moulded in the front wall (14) of the lid in order to provide the support for the lid and hold the insert in position. The insert (25) may be printed with advertising matter or other information which can be viewed through the transparent lid (2).

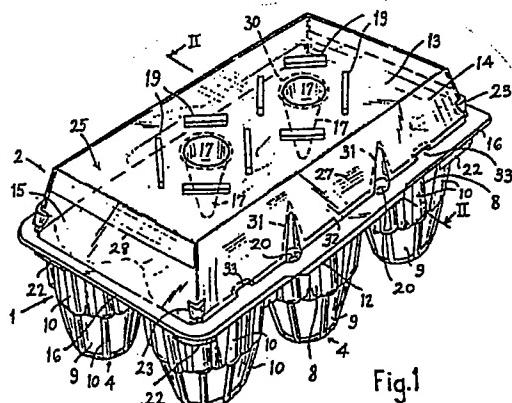


Fig.1

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PACKAGING BOXES OR CARTONS

1       The present invention relates to the packaging of  
eggs, fruit and other articles and, more particularly,  
to packaging boxes or cartons of the type comprising  
a hollow base part, which may be formed with a multi-  
5       plicity of compartments or article receiving pockets  
for containing individual articles, and a hollow cover  
part or lid which is fastened over the open top of the  
base part to close the latter. The base part may be  
moulded from fibre pulp or plastics material whilst  
10      the lid may be moulded from plastics material. For  
example, the base part and lid may conveniently be thermo-  
formed from sheet plastics material as a one or two-  
piece moulding.

15      Disposable packaging boxes, for example, moulded  
from thin plastics sheet material normally have intri-  
cately profiled hollow lids in order to provide the  
lids with sufficient strength and rigidity to prevent  
them collapsing under load, with consequent damage to  
the contents, such as when the boxes are stacked during  
20      transit and for the purposes of retail display. One  
example of this type of box is described in our patent  
specification GB-B-2019815. The lids of such boxes  
have unsufficient flat spaces or areas on which may  
be printed or otherwise reproduced advertising matter, decorative  
25      material, identification codes and other information and material  
required by suppliers. Hollow lids may be produced with flat  
tops and side walls for the presentation of printed  
information, but to achieve the required strength and  
rigidity the plastics sheet material must be of such  
30      a thickness as not to be a commercially viable

1 proposition for a disposable package.

With a view to overcoming the problems of lack  
of strength and printing space on boxes moulded wholly  
from plastics sheet material, disposable packaging boxes  
5 have been developed in which a hollow moulded base part  
is closed by a separate cardboard lid. Examples of  
this type of packaging box are described in patent speci-  
fications GB-A-1008481, 2110649 and 2115789. When the  
base part is of similar or greater height than its  
10 contents, it may be closed by a cardboard lid disposed  
generally flush with the rim of the base part, and  
when the base part is of lesser height than its contents,  
it may be closed by a preformed hollow cardboard lid, the  
free edges of which may be disposed within the rim of the  
15 base part and be supported on a rebate or ledges on  
the insides of the rim or peripheral walls of the base  
part. Such combinations are particularly attractive  
constructions for packaging eggs and other similar food  
items in that they provide for ready forming of the  
intricate base part, with its article receiving pockets,  
20 and visual inspection of the contents, whilst lending  
themselves to printing the lid with the required advert-  
ising matter and other information. However, known  
boxes of this type present problems with regard to use  
with automatic machinery for packing and closing the  
25 boxes and tend to be more costly than disposable pulp  
or plastics boxes because of the thicker gauge materials  
required in their manufacture.

It is an object of the present invention to alle-  
30 viate the disadvantages experienced with hitherto known

1 packaging boxes of the types described above and to  
provide a disposable packaging box or carton having  
a lid assembly with the required strength and rigidity  
characteristics and in which the lid may be moulded  
5 from thin plastics sheet material. Other objects are  
to provide such a packaging box or carton in which the  
lid assembly has significant flat spaces or areas for  
the display of advertising matter and other information and material  
and which is adapted for ease of packing and closing  
10 by automatic machinery.

Accordingly, the present invention consists in  
a packaging box or carton for eggs, fruit or other arti-  
cles, in which a hollow moulded base part is closed  
by a hollow lid formed from sheet plastics material  
15 and fastened over the open top of the base part, charac-  
terised in that the lid comprises a substantially flat or plain  
top portion and at least one substantially flat or plain peri-  
pheral wall portion depending from the top portion,  
and in that an insert of cardboard or other sheet  
20 material is disposed within the hollow lid and has a  
top portion juxtaposed the top of the lid and at  
least one flap or wall panel depending from an edge of  
the insert top juxtaposed the flat wall portion of the  
lid, the flap or wall panel of the insert engaging support  
25 means moulded on the inside of the base part or lid.

The invention enables the lid to be thermo-formed  
as a low-cost moulding of thin plastics sheet material  
either separately or in one piece with a similarly  
moulded base part. The sheet material insert supports  
30 and reinforces the thin plastics lid and provides the  
lid assembly with strength and rigidity. For preferred

1 results, the insert flap or wall panel, or at least  
one such flap or wall panel, engages support means on  
the base part. Because of the support and reinforce-  
ment provided by the insert, the thin plastics lid can  
5 be moulded with large flat spaces or areas which either  
may, themselves, be printed with advertising matter  
or other information required by suppliers or, when  
the lid is transparent, enable such information to be printed  
on the flat surfaces of the insert to be viewed through  
10 the transparent plastics lid. The required information  
may be printed not only on top of the lid or insert  
but also on the depending flap(s) or wall portion(s)  
where it may be viewed when the boxes are stacked.  
The insert does not require fastening in position with  
15 adhesive and is retained in the lid by engagement of  
the flap(s) or wall panel(s) with the support means  
on the lid wall or base part.

Advantageously, packaging boxes constructed in  
accordance with the present invention can be packed  
20 and closed by existing automatic packing machinery.  
Hence, in the case of boxes moulded in one piece from  
sheet plastics material, empty boxes are delivered to  
the machinery in a stacked condition, that is, stacked  
25 one on top of the other in an open position with their  
base parts and lids respectively internested. The  
machinery destacks or denests the boxes, conveys them  
in succession to a packing or filling unit, which deposits  
articles in the base parts, and thereafter conveys the  
filled boxes to a closing unit which engages under the  
30 top of each lid, swings the latter into inverted closed

- 1 position over its associated base part and at the same time exerts a downward force on the top of the lid to engage suitable fasteners on the lid and base part.
- 5 With the present invention, it is merely necessary to fit the inserts into the lids of the boxes either manually or automatically, preparatory to stacking the boxes for delivery to the packing machinery or station. Thereafter, the boxes may be fed through the packing machinery in the normal manner.
- 10 Preferably, the hollow lid has at least two flat peripheral wall portions depending from its top and the insert has at least two corresponding flaps or wall panels, at least one of the insert flaps or wall panels engaging support means on the base and at least one other of the insert flaps or wall panels engaging support means on the lid. With this construction the insert is both supported on the base part, when the lid is closed, to improve the strength and rigidity of the lid assembly, and engaged with support means on the
- 15 lid for retaining the insert in position both when the latter is opened or closed.
- 20 In a preferred embodiment, the box is of rectangular shape in plan and the lid has at least one of its pairs of opposite peripheral walls formed as flat wall portions.
- 25 The insert similarly has a flat rectangular top portion with flaps depending from the opposite edges corresponding to the flat walls of the lid. In another preferred embodiment, both pairs of opposite peripheral walls of the lid are flat and the insert has flaps or
- 30 wall panels depending from each edge of its rectangular

1 top. In the latter embodiment, all the flaps or wall  
panels of the insert may engage with support means on  
the base part or, alternatively, the flaps or wall panels  
at one pair of opposite edges of the insert top may  
5 terminate short of the full depth of the corresponding  
walls of the lid and may be unsupported.

The insert may be formed from a blank of sheet  
cardboard material which is creased at the edges of  
the top portion so that the marginal portions of the  
10 blank may be readily folded downwards to form the integral  
flaps or wall panels. Where the insert is formed with  
four flaps or wall panels depending from the edges of  
a rectangular top portion, the flaps may be left un-  
fastened at the corners or, alternatively, they may  
15 be fastened together at the corners, for example, with  
adhesive, in order to preform the insert into a hollow  
inner lid of the lid assembly.

Conveniently, the flap(s) or wall panel(s) of the  
insert are engaged with support means on the base part  
20 by simply having a lower edge which rests on inwardly  
projecting supports of the base part. Such support  
means may, for example, be formed by an upwardly facing  
surface of a rim about the upper edge of the base part,  
a rebate on the inside of this rim, or ledges or pro-  
25 jections flush with the rim or formed on peripheral  
walls of the base part and spaced below the rim. Simi-  
larly, the flap(s) or wall panel(s) of the insert may  
be engaged with support means on the inside of the lid  
by simply having a lower edge resting on support means  
30 on the peripheral walls of the lid. Such support means

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1 may comprise one or more inwardly moulded tabs or lugs  
on the peripheral walls of the lid. The bottom edge(s)  
of the insert flap(s) or wall panel(s) rest on these  
tabs or lugs although, alternatively, the latter may  
5 engage slots or openings in these flaps or wall panels.  
In a modification, opposite end portions of the bottom  
edge of a flap or wall panel, or rebates or notches  
in these end portions, may engage with inwardly projecting  
detents moulded at the adjacent corners of the lid.

10 The base part, which may have mutually parallel  
rows of article receiving pockets, may be moulded in  
one piece with the hollow lid, these two parts being  
hinged together along mutually adjacent rims sub-  
stantially parallel to the rows of article receiving  
15 pockets so that the lid can be folded about the hinge  
from an open position to a closed position in which  
it is inverted over the base part and closes the upper  
ends of the pockets. The base part and lid may have  
their rims opposite the hinge formed with fastening  
20 means, typically, press-stud type fastening devices,  
for fastening the two parts together in their closed  
position.

25 Posts may be formed between rows of article receiving  
pockets of the base part and project upwardly above  
the rim of the base part to provide additional support  
for the central parts of the top of the lid assembly.  
In another construction for providing central support  
for the lid assembly, the flat top of the lid is moulded  
with hollow posts which depend downwardly within the  
30 lid and engage with the tops of posts upstanding from

1       the base part between the rows of article receiving  
pockets. The posts of the lid project downwardly through  
suitable openings in the flat top portion of the insert  
so that this may be juxtaposed the inside of the lid  
5       top, and the adjacent ends of the posts of the lid and  
base part may simply rest one on the other or, alter-  
natively, the end of one post may interengage with a  
recess or opening in the top of the cooperating post  
so as to restrain lateral movement of the lid relatively  
10      to the base part.

In order that the present invention may be more  
readily understood, reference will now be made to the  
accompanying drawings, in which:-

15      Figure 1 is a perspective view of one embodiment  
of eggbox constructed in accordance with the invention,

Figure 2 is a section taken along the line II-II  
of Figure 1,

20      Figure 3 is an end view of the eggbox of Figure  
1, illustrating the eggbox in its fully open position  
and with a portion of the lid assembly partially broken  
away to illustrate details of the latter,

Figure 4 is a perspective view of a second embodi-  
ment of eggbox according to the invention, and

25      Figure 5 is an exploded perspective view of a third  
embodiment of eggbox.

Referring to Figures 1, 2 and 3 of the drawings,  
the eggbox is a one-piece moulding of transparent plastics sheet  
material. For example, conveniently, it is fluid pressure  
formed or vacuum formed from high impact polystyrene  
30      sheet material. It comprises a hollow base part 1 and

1 a hollow lid 2 both of generally rectangular shape in  
plan and joined together along mutually adjacent longitudinal rims by an integral web portion 3 serving as  
a hinge about which the lid 2 may be folded about the  
5 base part 1. In a preferred form of package for eggs,  
the package comprises two such boxes formed as an integral  
unit and joined together at mutually adjacent ends of  
the base parts and lids by small spaced plastics webs  
(not shown) which provide a line of weakness along which  
10 the package can be readily split into its two component  
boxes each containing, for example, six eggs. The two  
component boxes are mirror images of one another and  
therefore only one box is illustrated and will be described  
in detail.

15 The base part 1 comprises six egg receiving pockets  
4 disposed in two mutually parallel rows extending longitudinally of the base part, that is, parallel to the axis of the hinge formed by the web portions 3, with the pockets of the two rows arranged side-by-side.

20 The pockets are defined by profiled or sculptured peripheral walls 5 of the base part, hollow posts 6 moulded between the pockets 4 at the centre of each array of four adjacent pockets, and hollow partitions 7 interconnecting these posts and the peripheral walls of the  
25 base part. The peripheral walls 5 of the base part and the walls of the posts 6 and partitions 7 are so shaped that each pocket 4 is of generally circular shape in section and is formed by upper and lower merging conical frustra 8,9. The upper frustum 8 has a nearly vertical conical wall structure, inclined only slightly  
30

- 10 -

1 downwardly and inwardly, whilst the conical wall of  
the lower frustum 9 has a greater inclination than  
the upper frustum. Formed on the exterior of the two  
frustra are axially extending ribs 10 which serve to  
5 stiffen the pockets and act as cushions to protect the  
eggs against side blows or shocks. The bottom of each  
pocket 4 is closed by a bottom wall portion 11 which  
is slightly recessed above the bottom of each pocket  
and serves as a protective cushion for the bottom of  
10 an egg and to stiffen the closed bottom of the pocket.  
An egg E (shown in broken lines in Figure 2) disposed  
in a pocket 4 tends to seat on the sides 8,9 of the  
pocket and does not normally rest on the bottom 11.

15 A horizontal stiffening flange 12, which connects  
with the upper ends of the pockets, is formed about  
the rim of the base part. Along the side connected  
to the lid 2, this flange is integral with the web portion  
3 forming the hinge. The hollow posts 6 between the  
rows of article receiving pockets 4 project slightly  
20 proud of the rim.

The hollow lid 2 accommodates the upper ends of  
the eggs seated in the pockets 4 when it is folded about  
the web hinge 3 into an inverted closed position over  
the base part 1, as shown in Figure 2. The lid 2 comprises  
25 a generally flat or planar rectangular top portion 13  
having substantially flat or planar side and end wall  
portions 14,15 moulded integrally with the edges of  
the flat top of the lid. These peripheral walls 14,15  
are inclined slightly outwardly from the lid top 13  
30 and terminate in a horizontal external stiffening flange

1       16 which extends about the rim of the lid and, along  
the side connected to the base part, is integral with  
the web hinge 3. Moulded integrally with the lid top  
5       13, generally along the centre line of the lid and in  
positions opposite the two posts 6 of the base part,  
are two downwardly depending hollow posts 17. These  
lid posts are of generally conical shape and, when the  
lid is closed their apices engage in recesses 18 in  
the upper ends of the posts 6 to resist lateral movement  
10      of the lid relative to the base part. A series of four  
shallow hollow ribs 19 are moulded on the outside of  
the lid top about the adjacent ends of the posts 17  
and serve to engage with the bottom ends of the pockets  
of another similar box stacked on the lid top in order  
15      to locate a stack of such boxes in aligned relation.

        Moulded in the rim flange 16, opposite the hinge  
3, and the adjoining front side wall 14 of the lid are  
small downwardly projecting studs 20 which, when the  
lid is closed, are arranged to engage in cooperating  
20      slot-like cavities 21 moulded in the opposing rim flange  
12 of the base part in order to fasten the two parts  
together. This fastening is of the type described in  
our patent specification GB-B-2019815. The slot-like  
cavities 21 extend transversely to the axis of the hinge  
25      3 and taper from a wider inner portion to a slightly  
narrower outer portion. The relative dispositions of  
the studs 20 and slot-like cavities 21 is such that  
when the lid 2 is hinged into its closed position without  
any transverse distortions of the parts 1,2, the studs  
30      20 coincide with the narrower portions of the slot-like

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1       cavities 21. In order to engage the studs in the cavities  
and fasten the lid in its closed position, it is necessary  
slightly transversely to distort the lid 2 towards the  
inner ends of the slots, as for example occurs when  
5       the lid is automatically closed by the automatic closing  
unit in an egg packing line. The studs then engage  
in the wider portions of the slot-like cavities and,  
when the box is released by the closing unit, the inherent  
resiliency of the box tends to restore the lid to its  
10      undistorted position and, hence, urges the studs into  
the narrow portions of the slots, whereupon the fastening  
is secured.

For the purpose of storage, transportation and  
feeding into automatic egg packing machinery, the boxes  
15      are stacked in the fully open condition, as shown in  
Figure 3, with their base parts 1 respectively nested  
one within another and their lids 2 respectively nested.  
In order to facilitate destacking of the nested boxes  
by mechanical separating devices each box is provided  
20      at the four corners of its base part and lid with stacking  
ledges 22,23. When boxes are stacked, the ledges on  
the two parts of one box rest on the rims 12,16 of the  
parts within which they are nested in order to prevent  
the parts from wedging or jamming together.

25      Disposed within the lid 2 is an insert 25 which  
is folded-up from a blank of cardboard sheet material.  
This insert comprises a flat or planar top portion 26  
of rectangular shape corresponding to the lid top 13  
and flaps 27,28 depending from the side and end edges  
30      of the insert top 13. These flaps are formed by folding

1 marginal portions of the cardboard blank downwardly  
about creases 29 formed along appropriate lines on the  
blank. To accommodate the posts 17, holes 30 are stamped  
in the top 13 of the insert, whilst the front flap 27  
5 is stamped with notches 31 to accommodate the stud  
mouldings 20 in the front wall 14 of the lid. When  
the insert is disposed within the lid, its flat top  
26 is juxtaposed the inside of the lid top 13 and the  
flaps 27,28 are juxtaposed the insides of the side and  
10 end walls 14,15 of the lid. The flaps 27,28 tend to  
be resiliently urged outwardly into positions closely  
adjacent or in contact with the lid walls by the natural  
resiliency of the creased cardboard. The straight bottom  
edge 32 of the front flap 27 of the insert terminates  
15 slightly short of the bottom edge of the juxtaposed  
front wall 14 of the lid and rests on small tabs or  
lugs 33 moulded on the inside of the front wall 14.  
On the other hand, the straight bottom edge 34 of the  
20 rear flap 27 of the insert projects slightly proud of  
the bottom edge of the rear side wall 14 of the lid  
and, when the lid is closed, rests on the upper surface  
of the adjacent part of the rim flange 12 of the base  
part. The end flaps 28 of the insert only extend down-  
wardly for part of the depth of the juxtaposed end walls  
25 15 of the lid.

Prior to folding down of the insert flaps 27,28,  
the insert 25 may readily be printed with advertising  
matter and other information. Thereafter, and prior  
to packing of the eggbox, the insert may be assembled  
30 within the lid 2, either manually or automatically

1 by machine, by positioning the insert in the lid with  
the holes 30 over the posts 17 and the bottom edge 32  
of the front flap behind the retaining lugs 33 and then  
pressing the insert fully into the lid until the top  
5 26 of the insert contacts the inside of the top 13 of  
the lid. In this position, the insert is retained in  
the lid by the lugs 33 and the natural resiliency of  
the creased cardboard tending to urge the flaps outwardly.  
Empty eggboxes having their lids fitted with these inserts  
10 may be delivered to automatic machinery for packing  
and closing the boxes in the stacked condition in which  
the base parts 1 and lids 2 of the open boxes (Figure  
3) are respectively internested. The boxes may then  
be destacked, filled and closed by the machinery in  
15 the normal manner. During these operations, the insert  
is retained in position in the lid. Moreover, when  
the lid is closed, the bottom edge 34 of the rear insert  
flap 27 bears on the adjacent rim flange 12 of the base  
part and this supports the top of the insert against  
20 the inside of the top of the lid. Hence, when the egg-  
box is closed, the insert 25 is retained closely adjacent  
or in contact with the top and peripheral walls of the  
lid and the information printed thereon is visible  
through the transparent top and sides of the lid. Also,  
25 the insert flaps and, particularly, the front and rear  
flaps 27 supported on the retaining lugs 22 and resting  
on the base part, respectively, serve to support and  
reinforce the thin plastics sheet material of the lid  
2 and prevent the lid from collapsing under load with  
30 consequent risk of damage to the contents of the box.

1       The embodiment illustrated in Figure 4 is similar  
to the preceding embodiment save that the end flaps  
36 of the cardboard insert 25 extend for the full depth  
of the end walls 15 of the lid 2 and project slightly  
5       proud of the bottom edges of these end walls so that  
their own straight bottom edges 37 rest on the adjacent  
end parts of the rim flange 16 of the base part, when  
the lid is closed, similarly to the rear side flap 27  
of the insert. This enhances the support for the thin  
10      plastics lid 2, in addition to providing extra space  
for printed matter at opposite ends of the lid assembly.

The embodiment illustrated in Figure 5 comprises  
a moulded plastics base part 40 and a separate thin  
plastics lid 41 having a preformed cardboard insert  
15      42 for supporting and reinforcing the thin plastics  
lid. Similarly to the previous embodiments, the separately formed base part 40 and lid 41 may be moulded from  
thin transparent plastics sheet material. In the preferred form,  
the package comprises two base parts 40 formed as an  
20      integral unit and joined together at mutually adjacent  
longitudinal edges by small spaced plastic webs 43 which  
provide a line of weakness along which the base parts  
can be readily split into two components each containing,  
for example, twelve eggs as shown. The two components  
25      base parts are identical and therefore only one base  
part 40 is illustrated and will be described in detail.

The base part 40 comprises twelve egg receiving  
pockets 44 disposed in three mutually parallel rows  
extending longitudinally of the base part. The pockets  
30      are defined by suitably profiled peripheral walls 45, 46

1 of the base part and, internally of the base part, by  
suitably shaped hollow posts 47, moulded at the centre  
of each array of four adjacent pockets 44, and hollow  
partitions 48 interconnecting the posts and the profiled  
5 walls of the base part. The walls 45,46 of the base  
part, posts 47 and partitions 48 are so shaped that  
each pocket 44 is generally part egg-shaped. Moulded  
on the outsides of the pockets are hollow axial extending  
ribs 49 which serve to stiffen the pockets and act as  
cushions to protect the eggs against side blows or shocks.  
10 The closed bottom of each pocket is formed with an internal  
hollow boss (not shown) which serves as a protective  
cushion for the bottom of an egg and to stiffen the  
closed bottom of the pocket. Two adjacent posts 47  
15 at opposite ends of the base part project above the  
rim of the base part in order to serve as a support  
for the underside of the lid assembly, as will be herein-  
after more fully described.

The rim of the base part includes a horizontal  
20 outwardly projecting flange 50 which, at opposite ends  
46 of the base part is connected to the upper ends of  
the adjacent egg receiving pockets 44 by short end wall  
portions 51. Along opposite sides upstanding shoulder  
portions 52 between the pockets terminate just below the rim  
25 flange 50. Projecting inwardly from each end wall  
portion 51 of the base part, just below the rim flange  
50 are a pair of hollow fastening tabs 53 for the lid.  
Below the fastening tabs, the end wall profile of the  
base part is designed to form external hollow protru-  
30 berances 54 which provide stacking shoulders on the

1       outsides of the end walls 46 of the base part for engagement with the tabs 53. When the base parts are stacked  
5       in nested relation, the stacking shoulders of an upper base part 40 rest on the tabs 53 of the lower base part  
within which it is nested in order to prevent the parts from wedging or jamming together and facilitate destacking of the bases by mechanical separating devices.

10      The transparent plastics lid 41 has a flat or planar top 55 with integrally formed flat or planar peripheral walls 56,57 depending from the side and end edges of the top and inclined outwardly with respect to the top. The opposite end walls 57 of the lid are formed with pairs of fastening slots 58 which are arranged to cooperate with the fastening tabs 53 on the base  
15      part.

20      The cardboard insert 42 is preformed so as to be of similar configuration to the lid 41 and comprises a flat top 60 and side and end wall panels 61,62 depending from the edges of the flat top. It may be formed by folding a suitably stamped sheet of cardboard, the folded down portions of the blank being secured together at the corners of the insert to form the wall panels 61,62. The side wall 61 of the insert are of similar depth to the side walls 56 of the lid whilst the end  
25      walls 62 have recessed bottom edges 63 to permit satisfactory cooperation between the fastening tabs 53 and slots 58 of the base part and lid.

30      The insert may be printed on the outside of its top and/or wall panels with any required advertising matter and other information and material whilst in its blank form

1 and prior to folding down and fixing of the side and  
end wall panels 61,62.

5 In order to close the base part 40, after it has  
been filled with eggs, the insert 42 and lid 41 are  
fitted onto the base part in succession or as a single  
assembly. In either event, the bottom edges 64,65  
of the side walls 61,56 of the insert and lid rest  
on the shoulders 52 inside the rim flange 50 of the  
base part and the central parts of the insert and lid  
10 are supported by the upstanding posts 47. As the lid  
41 is fitted into position, the end walls 57,46 of  
the lid and base part are flexed so that the fastening  
tabs 53 engage in the slots 58 in the lid to fasten  
the lid in its closed position. When the box is to  
15 be opened, it is a simple matter for a person to flex  
the walls and disengage the fastening tabs and slots.

Hence, the thin plastics lid 41 is firmly supported  
by the cardboard insert 42 and a series of such boxes  
may be stacked one on top of the other without risk  
20 of damage to the contents. Moreover, in the closed  
position of the lid assembly, the top and wall panels  
60,61 of the insert lie closely adjacent or in contact  
with the corresponding parts 55,56 of the lid so that  
the printed matter on the insert is readily visible  
25 through the lid.

CLAIMS

1. A packaging box or carton for eggs, fruit or other articles, in which a hollow base part (1,40) is closed by a hollow lid (2,41) formed from sheet plastics material and fastened over the open top of the base part, characterised in that the hollow lid (2,41) comprises a substantially flat or plain top portion (13,55) and at least one substantially flat or plain peripheral wall portion (14,15,56,57) depending from the top portion, and in that an insert (25,42) of cardboard or other sheet material is disposed within the hollow lid (2,41) and has a top portion (26,60) juxtaposed the top (13,55) of the lid and at least one flap or wall panel (27,28, 36,61,62) depending from an edge of the insert top (26,60) juxtaposed the peripheral wall portion (14,15, 56,57) of the lid, the flap or wall panel of the insert engaging support means (12,33,52) formed on the inside of the base part or lid.
2. A packaging box or carton according to claim 1, characterised in that the hollow lid (2,41) has at least two substantially flat or plain peripheral wall portions (14,15,56,57) depending from its top (13,55), and the insert (25,42) has at least two corresponding flaps or wall panels (27,28,36), at least one (27) of the insert flaps or wall panels engaging support means (12) on the base and at least one other (27) of the insert flaps or wall panels engaging support means (33) on the lid.
3. A packaging box or carton according to claim 1 or 2, characterised in that the hollow lid (2,41) is of rectangular shape in plan and has substantially

- 20 -

- 1 flat or plain peripheral wall portions (14,15,56,57) depending from at least one pair of opposite edges of its rectangular top (13,55), and the insert (25,42) has a rectangular top portion (26,60) with flaps or  
5 wall panels (27,28,36,61,62) depending from the opposite edges thereof juxtaposed the flat or plain peripheral walls of the lid.
4. A packaging box or carton according to claim 1 or 2, characterised in that the lid (2,41) is of rectangular shape in plan and has substantially flat or plain peripheral wall portions (14,15,56,57) depending from both the side and end edges of its rectangular top (13,55), and the insert (25,42) has a rectangular top portion (26,60) and flaps or wall panels (27,28,36,  
10 61,62) depending from both its side and end edges juxtaposed the peripheral walls of the lid.
- 15 5. A packaging box or carton according to claim 3 or 4, characterised in that all the flaps or wall panels (27,36,61) of the insert (25) engage support means (12,33) on the base part and/or lid.
- 20 6. A packaging box or carton according to claim 4, characterised in that the one pair of opposite flaps or wall panels (28,62) of the insert (25,42) are of less depth than the depth of the juxtaposed walls (15,  
25 57) of the lid and are unsupported.
7. A packaging box or carton according to any preceding claim, characterised in that the or each flap or wall panel (27,36,61) of the insert (25,42) engaged with the support means (12,33,52) has a bottom edge (32,34,64)  
30 resting on the support means.

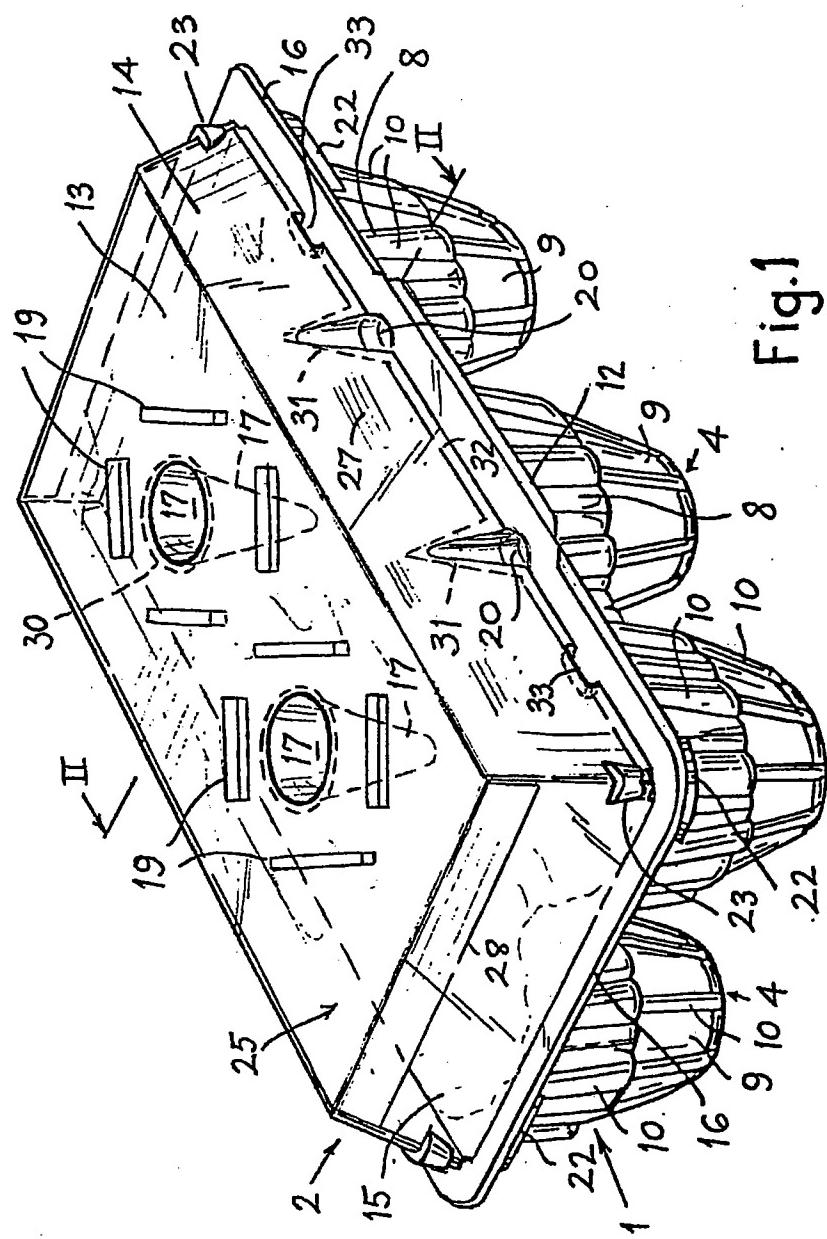
- 1       8. A packaging box or carton according to claim 7,  
characterised in that the support means disposed on  
the base part comprises a flange (12) about the rim  
of the base part or one or more ledges, shoulders or  
other projections (52) on the inside of the base part  
disposed substantially level with a space below the  
rim.
- 5       9. A packaging box or carton according to claim 7  
or 8, characterised in that the support means disposed  
on the lid (2) comprises one or more inwardly projecting  
tabs or lugs (33) on the peripheral wall portion(s)  
of the lid.
- 10      10. A packaging box or carton according to any preceding  
claim, characterised in that the base part and lid  
(1,2) are a one-piece moulding of sheet plastics material  
and are hinged together by a moulded plastic web (3)  
formed between mutually adjacent rims (12,16), the  
lid being foldable about the hinge (3) from an open  
position to a closed position in which it is inverted  
15      over the base part and closes the open upper end thereof,  
the base part and lid having fastening means (20,21)  
opposite the hinge for fastening them together in their  
closed position.
- 20      11. A packaging box or carton according to any preceding  
claim, characterised in that the base part (40) is  
formed with mutually parallel rows of article receiving  
pockets (44), and upstanding posts (47) are formed  
between the pockets and project upwardly above the  
rim (50) of the base part for engagement with the under-  
25      side of the top of the assembly of the insert (42)  
and lid (41).
- 30

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- 1        12. A packaging box or carton according to any preceding  
claim 1 to 10, characterised in that the base part  
(1) is formed with mutually parallel rows of article  
receiving pockets (4) and posts (6) are formed between  
the article receiving pockets, and in that the top  
5        (13) of the lid (2) is formed with downwardly depending  
posts (17) which rest upon, or engage in recesses (18)  
in, the posts (17) of the base part.
- 10        13. A packaging box or carton according to any preceding  
claim, characterised in that the insert (25,42) is  
formed from a blank of cardboard sheet material which  
is folded to provide a flat top (26,60) and depending  
flaps or wall panels (27,28,36,61,62).

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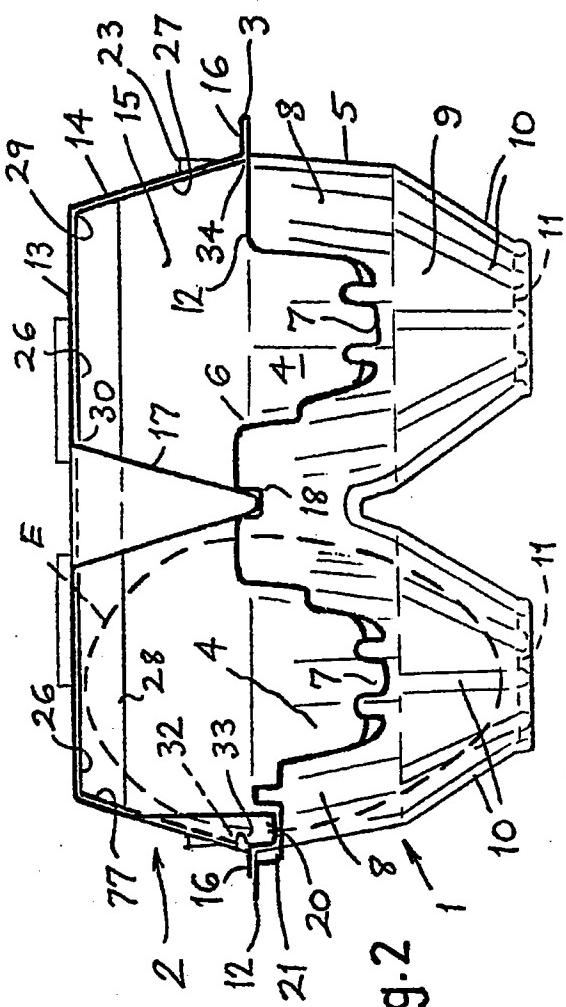
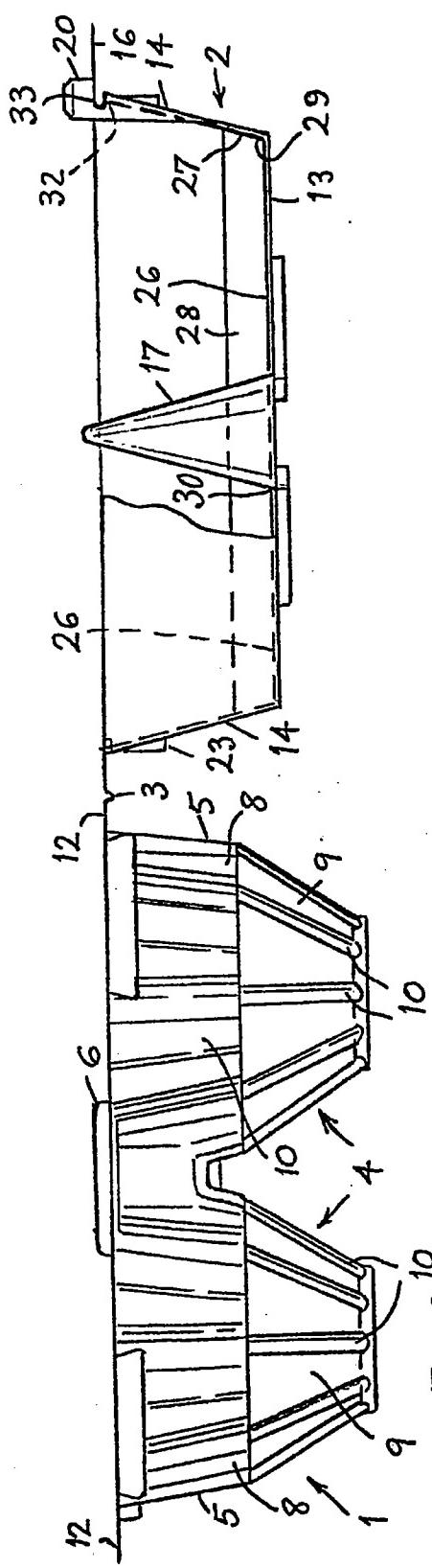


Fig. 2

Fig. 3



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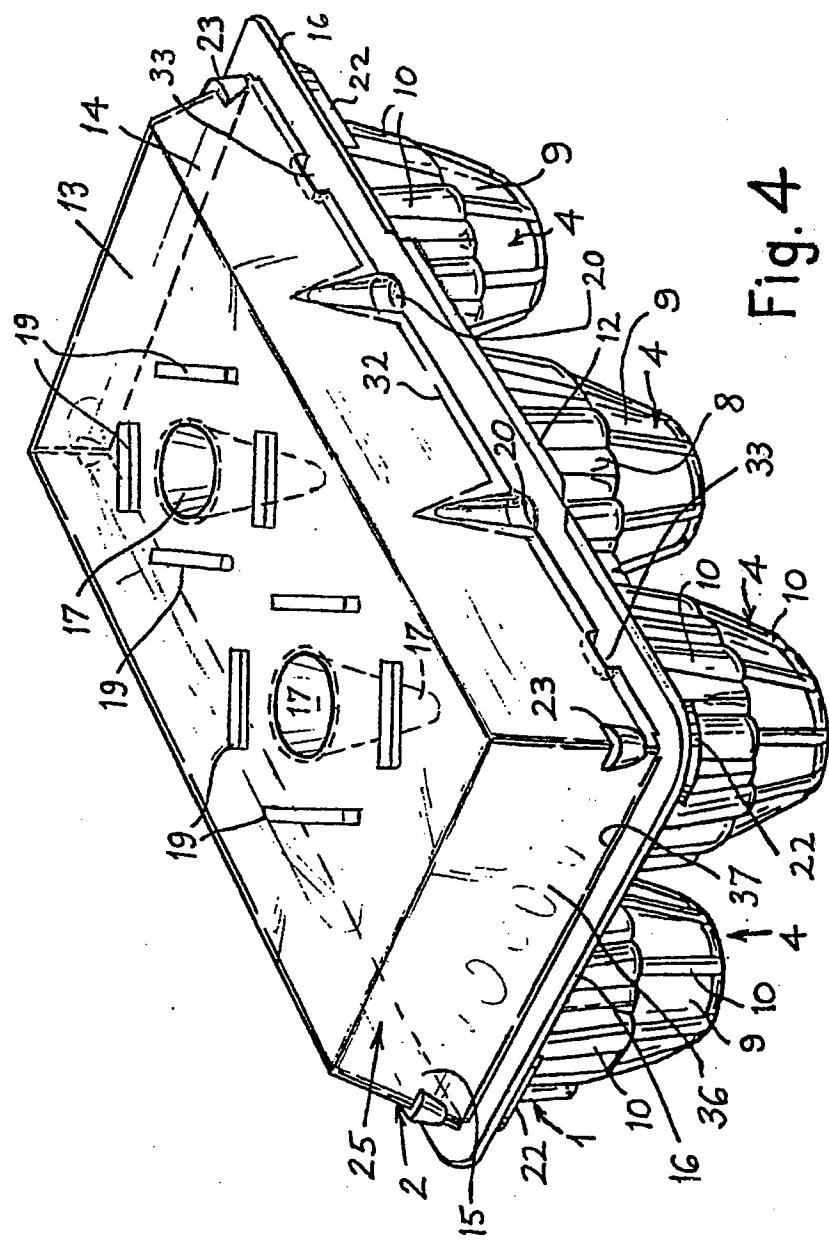


Fig. 4

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Fig. 5

